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Reference: upcoming article for Engineers Digest

Enjoyed our conversation. Hope you found our discussion helpful with your article. As I agreed to within our conversation here are some thoughts that you can consider for the article.

Again, please send a copy (or a few copies) of the article when published to Forrest Breyfogle, Smarter Solutions, Inc. 13776 U.S. Highway 183 N., Suite 122-110 Austin, TX 78750-1811.

Breyfogle states "Design of Experiments (DOE), sometimes called Multivariable Testing (MVT), and other statistical tools can be very beneficial within organizations, if these tools are implemented *wisely*. We have found DOE to be a particular useful tool in both Design, Manufacturing, and Service/Transactional environments, since someone can address a very large number of factors within a relatively small number of test trials."

Breyfogle continues "There are two basic approaches to using statistical and other related tools within organizations. I will use the servicing of an automobile to illustrate my point. An automobile service technician might be taught only the basic skills of using a wrench or some other tool; however, this does not make the person a skill mechanic. Similarly a person only trained in DOE might see great benefits for this new "hammer;" however, everything later can become a "nail", rather than choosing another tool besides DOE that can yield a more timely solution. Both automobile mechanics and process improvement technicians need to focus on the big picture and choose the most appropriate tool to use for encountered situations. Let's now net out the two basic approaches to using statistical tools and other related tools within organizations eluded to earlier. In the first approach organizations can teach the tools to individuals hoping that they will be able to figure out when each tool should be used. In the second approach individuals apply the most appropriate tool to projects that are linked to key business metrics, through the business strategy of Six Sigma."

"Six Sigma as a business strategy offers a road map that helps organizations determine where to focus their efforts and then how to integrate the application of tools such that there are tangible results to the "big picture" metrics of their organization," Breyfogle explains. "When Six Sigma is implemented *wisely* it becomes a business strategy within the organization where projects are select through interface with an executive Six Sigma steering committee. This steering committee orchestrates the selection of projects such that the bottom-line benefits to their organization are maximized through these projects. Six Sigma practitioners, often called Six Sigma Black Belts, then integrate with the aid of their team the application of statistical and other tools to their projects. Using Six Sigma Black Belts through this process organizations can average more than one million dollars in bottom-line benefits annually for each trained Six Sigma Black Belt."

Breyfogle adds "Six Sigma Black Belt training is conducted in a wave that consists of four weeks of training over four months, where attendees work their project during the three weeks between workshop sessions, often with coaching from their instructor. Other Six Sigma roles and training exists for Executives, Champions, and Six Sigma Green Belts within this Six Sigma Business Strategy process."

Forrest Breyfogle is president of Smarter Solutions Inc. (www.smartersolutions.com), author of *Implementing Six Sigma: Smarter Solutions Using Statistical Methods* (Wiley 1999) and co-author of *Managing Six Sigma: A Practical Guide to Understanding, Assessing, and Implementing the Strategy that Yields Bottom-Line Success* (Wiley 2001). Smarter Solutions Inc. conducts both on-site and public training/coaching in the *wise* application of Six Sigma, where they integrate the content of their books within workshops sessions.